Effect of global posture re-education on range of motion, pain and quality of life in adults individuals with chronic lower back pain: a randomized clinical trial

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Global Postural Re-Education (RPG®) method, developed by the French physiotherapist Philippe E. Souchard, is based on progressing knowledge of human biomechanics and motor coordination, all applied to postural re-education and neuromusculoskeletal rehabilitation. It requires an active role to the patient can be applied to patients of any age, respecting each person's capability and is indicated in for people presenting postural ailments and musculoskeletal disorder. In the same way, Mézières Method end point is regain "body harmony". Raggi® Method and Pancafit® apply the principles previously theorized and combine them to diaphragmatic breathing. Our asses was to evaluate the effect of muscle chain stretching, as proposed by the global posture reeducation method, in the therapy of patients with chronic lower back pain. Eight patients (6 male and 2 female, aged 52.0 +/- 7.3 years old), performed global posture re-education using Pancafit according Raggi Method, once a week. The treatment program consisted of 1-hour individual sessions per week for eight weeks. Patients were evaluated before and after treatment and tested for Platform Lizard (Stabilometry and postural assessment), pain intensity (by means of visual analog scale), range of motion (bending test), and health-related quality of life (by the SF-36 questionnaire). Significant pain relief and range of motion improvement were observed after treatment; quality of life also improved. Muscle chain stretching was effective in reducing pain and improving the range of motion and quality of life of patients with chronic lower back pain, suggesting that stretching exercises should be prescribed to chronic back pain patients.

References

G.B.J. Andersson. The Lancet, 1999;354:581-85. S.Piloni, J. G. F. B.da Silva; X. Dopico. Fitness & Performance Journal,2006,v.5, n 6, p. 344-347. Souchard PE.Principes et originalité de la reéducation posturale globale.Paris: Le Pousoë; 2003.

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